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09/877,370	06/07/2001	Firoz Kanchwalla	INFO-P009	1777

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EXAMINER	
RONES, CHARLES	
ART UNIT	**PAPER NUMBER**
2175	10

DATE MAILED: 05/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/877,370	KANCHWALLA ET AL.	
	Examiner	Art Unit	
	Charles L. Rones	2175	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *March 8, 2004* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Request for Reconsideration

The request for reconsideration timely filed on March 8, 2004 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3, 15, and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1 and 15, the phrase "meaningful business term" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "meaningful business terms") and is relative to a user, thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Regarding claims 3 and 17, the phrase "understandable to a user" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "understandable to a user"), which is similar to saying "easy to understand" which is a relative concept, thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Drawings

New corrected drawings are required in this application because the current drawings have lines which are not clearly defined and the characters are not clear. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Papierniak et al. (U.S. Patent No.6,151,601) in view of Bello et al. (U.S. Patent No. 6,477,525).

As to claims 1 and 15, Papierniak et al. teaches a computer implemented method for transporting data in a data warehousing application (see Abstract; see column 1, lines 9-13), comprising the steps of:

a) extracting data from at least one source containing data having a standard data structure (see Fig. 9; see column 4, lines 56-60; also see column 19, lines 26-27);

b) translating said data to form translated data containing meaningful business terms (see column 4, lines 54-60);

c) loading said translated data wherein said translated data is received analytic business components; (see Fig. 10, element 346; also see column 19, lines 27-34);

d) processing said translated data to obtain data having a common structure (see column 13, lines 64-67; see column 19, lines 20-25; also see column 20, lines 25-31; where "common structure" is read on "consistent data");

e) transforming said data having a common structure into a format suitable for loading into a data warehouse (see column 22, lines 41-44; also see column 25, lines 8-9); and

f) storing the data transformed in step e) (see column 5, lines 2-7).

Papierniak et al. does not expressly teach staging area.

Bello et al. teaches staging area (see column 34, lines 54-62; Fig. 22; where "staging" is read on "area where normalizing or denormalizing takes place, further, data transformation wherein the data is parsed analyzed, validated, and organized before storing into the warehouse is deemed to be perform staging").

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Papierniak et al. to include a staging area.

It would have obvious to a person having ordinary skill in the art at the time the invention was made to modified Papierniak et al. by the teachings of Bello et al., because having a staging area would enable the business information to be retrieved faster and in an efficient manner (see Bello et al., column 5, lines 3-6).

As to claims 2 and 16, Papierniak et al. as modified teaches a method, wherein step b) further comprises performing joins in said data (see column 26, lines 6-10).

As to claims 3 and 17, Papierniak et al. as modified teaches a method, wherein step b) further comprises presenting source fields of said data in a form that is understandable to a user (see column 3, lines 9; where "understandable to the user" is read on "general marketing terms").

As to claim 4, Papierniak et al. as modified teaches a method, wherein said at least one analytic business component encapsulates extraction logic as data is moved from said data source (see Fig. 10, element 330; also see column 19, lines 13-20).

As to claims 5 and 18, Papierniak et al. as modified teaches a method, wherein step c) further comprises:

c2) joining tables from said translated data (see column 26, lines 6-10); and

c4) cleansing said translated data (see column 25, lines 11-13; where "cleansing" is read on "scrubbing").

Papierniak et al. as modified does not expressly teach denormalizing or normalizing at least some of said translated data.

Bello et al. teaches denormalizing or normalizing at least some of said translated data (see column 34, lines 54-62).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Papierniak et al. to include denormalizing or normalizing at least some of said translated data.

It would have obvious to a person having ordinary skill in the art at the time the invention was made to modified Papierniak et al. by the teachings of Bello et al., because having a staging area would enable the business information to be retrieved faster and in an efficient manner (see Bello et al., column 5, lines 3-6)

As to claim 6, Papierniak et al. as modified teaches a method, wherein step d) further comprises converting source-specific terminology into analytic data interface terminology (see Abstract; see column 3, lines 7-10; also see column 20, lines 25-31).

As to claims 7 and 20, Papierniak et al. as modified teaches a method, wherein step d) further comprises performing source specific configuration by setting data

indicators and choosing a set of rows that will be put into said data warehouse (see Fig. 22, element 430; see column 25, lines 58-67).

As to claims 8 and 19, Papierniak et al. as modified teaches a method, wherein step d) further comprises

d2) providing a common way to flag a record to be deleted (see column 14, lines 59-62; also see column 15, lines 40-43); and

d3) performing data type conversions (see Abstract; see Fig. 10, element 300; also see column 17, lines 60-65).

Papierniak et al. does not expressly teach d1) combining extract-specific staging area objects.

Bello et al. teaches staging area objects. (see column 34, lines 54-62).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Papierniak et al. to include combining extract-specific staging area objects.

It would have obvious to a person having ordinary skill in the art at the time the invention was made to modified Papierniak et al. by the teachings of Bello et al., because by having a extract-specific staging area objects, enables the business information to be retrieved faster and in an efficient manner (see Bello et al., column 5, lines 3-6).

As to claim 9, Papierniak et al. as modified teaches a method, wherein said data type conversion is performed by publishing the structure of each field and converting said data type using a consistent approach (see column 13, lines 64-67; also see column 20, lines 25-31).

As to claims 10 and 21, Papierniak et al. as modified teaches a method, wherein step e) further comprises cleaning data by enforcing commonalties in dates, names and other data types (see column 2, lines 36-39; also see column 3, lines 19-23; where "enforcing commonalities" is read on "synchronization").

As to claims 11 and 22, Papierniak et al. as modified teaches a method, wherein step e) further comprises e1) consolidating business concepts across an entire value change into integrated structures that are suitable for querying and reporting (see column 3, line 65 through column 4, line 11; also see column 19, lines 37-39); and

Papierniak et al. does not expressly teach e2) normalizing source definition into a single common definition.

Bello et al. teaches normalizing source definition into a single common definition. (see column 35, line 51 through column 36 line 10; where "source definition into a single common definition" is read on "avoid duplication").

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Papierniak et al. to include normalizing source definition into a single common definition.

It would have obvious to a person having ordinary skill in the art at the time the invention was made to modified Papierniak et al. by the teachings of Bello et al., because by normalizing source definition into a single common definition, enables the business information to be retrieved faster and in an efficient manner (see Bello et al., column 5, lines 3-6).

As to claim 12, Papierniak et al. teaches a system for transporting data to a data warehouse comprising:

at least one analytic business component coupled to a data source (see Fig. 9 and Fig.10) and coupled to said at least one staging area (see column 6, lines 11-14), said analytic business component for translating operational data (see column 14, lines 4-9) from said data source into translated data containing meaningful business terms wherein said translated data is received analytic business components (see column 3, lines 6-9);

at least one source adapter coupled to said at least one staging area for processing said translated data to obtain data having a common structure (see column 5, line 56 through column 6, line 10); and

an analytic data interface coupled to said source adapter (see Fig. 6, element S10; also see column 14, lines 4-7) and adapted to receive said data having a common

structure (see column 13, line 64 through column 14, line 3), said analytic data interface transforming data for loading into a data warehouse (see column 17, lines 60-65).

Papierniak et al. does not expressly teach at least one staging area, said at least one staging area adapted to store data.

Bello et al. teaches at least one staging area (element 110), said at least one staging area adapted to store data. (see Fig. 1, element 110; also see column 6, lines 18-20).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Papierniak et al. to include at least one staging area, said at least one staging area adapted to store data.

It would have obvious to a person having ordinary skill in the art at the time the invention was made to modified Papierniak et al. by the teachings of Bello et al., because having a staging area would enable the business information to be retrieved faster and in an efficient manner (see Bello et al., column 5, lines 3-6)

As to claim 13, Papierniak et al. as modified teaches a method, wherein said at least one staging area is one or more target in a warehouse designer that includes staging area tables (see Fig. 18; see column 5, lines 25-41; also see column 25, lines 41-57).

As to claim 14, Papierniak et al. as modified teaches a method, wherein said at least one analytic business component is source-specific and wherein said at least one analytic business component includes at least one maplet in a warehouse designer (see column 23, lines 10-17; where "maplet" is read on " design templates").

Claim Rejections - 35 USC § 102

> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-4, 6-7, 9-10, 17, 13-17, and 20-21 are rejected under 35 U.S.C. 102(e) as being anticipated over Papierniak et al. (U.S. Patent No. 6,151,601).

As to claims 1 and 15, Papierniak et al. teaches a computer implemented method for transporting data in a data warehousing application (see Abstract; see column 1, lines 9-13), comprising the steps of:

a) extracting data from at least one source containing data having a standard data structure (see Fig. 9; see column 4, lines 56-60; also see column 19, lines 26-27);

b) translating said data to form translated data containing meaningful business terms (see column 4, lines 54-60);

c) loading said translated data into a staging area wherein said translated data is received analytic business components wherein the data is parsed analyzed, validated, and organized before storing into the warehouse is deemed to be perform staging; (see Fig. 10, element 346; also see column 19, lines 27-34);

d) processing said translated data to obtain data having a common structure (see column 13, lines 64-67; see column 19, lines 20-25; also see column 20, lines 25-31; where "common structure" is read on "consistent data");

e) transforming said data having a common structure into a format suitable for loading into a data warehouse (see column 22, lines 41-44; also see column 25, lines 8-9); and

f) storing the data transformed in step e) (see column 5, lines 2-7).

As to claims 2 and 16, Papierniak et al. as modified teaches a method, wherein step b) further comprises performing joins in said data (see column 26, lines 6-10).

As to claims 3 and 17, Papierniak et al. as modified teaches a method, wherein step b) further comprises presenting source fields of said data in a form that is understandable to a user (see column 3, lines 9; where "understandable to the user" is read on "general marketing terms").

As to claim 4, Papierniak et al. as modified teaches a method, wherein said at least one analytic business component encapsulates extraction logic as data is moved from said data source (see Fig. 10, element 330; also see column 19, lines 13-20).

As to claim 6, Papierniak et al. as modified teaches a method, wherein step d) further comprises converting source-specific terminology into analytic data interface terminology (see Abstract; see column 3, lines 7-10; also see column 20, lines 25-31).

As to claims 7 and 20, Papierniak et al. as modified teaches a method, wherein step d) further comprises performing source specific configuration by setting data indicators and choosing a set of rows that will be put into said data warehouse (see Fig. 22, element 430; see column 25, lines 58-67).

As to claim 9, Papierniak et al. as modified teaches a method, wherein said data type conversion is performed by publishing the structure of each field and converting

said data type using a consistent approach (see column 13, lines 64-67; also see column 20, lines 25-31).

As to claims 10 and 21, Papierniak et al. as modified teaches a method, wherein step e) further comprises cleaning data by enforcing commonalties in dates, names and other data types (see column 2, lines 36-39; also see column 3, lines 19-23; where "enforcing commonalities" is read on "synchronization").

As to claim 12, Papierniak et al. teaches a system for transporting data to a data warehouse comprising:

at least one analytic business component coupled to a data source (see Fig. 9 and Fig.10) and coupled to said at least one staging area (see column 6, lines 11-14), said analytic business component for translating operational data (see column 14, lines 4-9) from said data source into translated data containing meaningful business terms wherein said translated data is received analytic business components (see column 3, lines 6-9);

at least one source adapter coupled to said at least one staging area for processing said translated data to obtain data having a common structure (see column 5, line 56 through column 6, line 10);

at least one staging area, said at least one staging area adapted to store data (see Fig. 10, element 346; also see column 19, lines 27-34); and

an analytic data interface coupled to said source adapter (see Fig. 6, element S10; also see column 14, lines 4-7) and adapted to receive said data having a common structure (see column 13, line 64 through column 14, line 3), said analytic data interface transforming data for loading into a data warehouse (see column 17, lines 60-65).

As to claim 13, Papierniak et al. as modified teaches a method, wherein said at least one staging area is one or more target in a warehouse designer that includes staging area tables (see Fig. 18; see column 5, lines 25-41; also see column 25, lines 41-57).

As to claim 14, Papierniak et al. as modified teaches a method, wherein said at least one analytic business component is source-specific and wherein said at least one analytic business component includes at least one maplet in a warehouse designer (see column 23, lines 10-17; where "maplet" is read on " design templates").

Response to Arguments

Applicant's arguments filed March 8, 2004 have been fully considered but they are not persuasive.

Firstly, Applicant argues that Papenriak and Paperniak in view of Bello does not disclose a staging area.

In response, Examiner maintains that Paperniak and alternatively, Paperniak in view of Bello discloses a staging area. First, Paperniak disclose such wherein the data is transformed by being parsed, analyzed, validated, and organized before storing into the warehouse. Alternatively, Bello discloses "normalizing and denormalizing data" before storing deemed to be staging the data.

Lastly, Applicant argues that Papierniak does not disclose having a "wherein said translated data is received analytic business components."

In response, Examiner maintains that Papierniak discloses such wherein Papierniak discloses where the translated data is received from business sources deemed to be analytic business components (warehouse).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles L. Rones whose telephone number is (703-306-3030. The examiner can normally be reached on Mondays – Thursdays from 9 am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici, can be reached on (703-305-3830. The fax numbers of the group is (703) 746-7239.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-9600.

Charles L. Rones
Primary Examiner
Art Unit 2175

May 6, 2004